

IN THE CLAIMS:

Please AMEND claims 1-4, 6, 7, 9, and 10, and ADD claims 11-15, as follows:

1. (Currently Amended) A sheet feeding device comprising:
~~in which sheets contained in sheet containing means detachably attached to an apparatus main body for containing sheets;~~
~~sheet pick-up are fed by sheet feeding means adapted to vertically move for feeding the sheet contained in said sheet containing means, said sheet feeding device comprising:~~
a sheet support member provided in the sheet containing means and adapted to vertically move while supporting the sheets;
lifter means for raising and lowering said sheet support member so as to bring an uppermost surface of the sheets supported by said sheet support member to a predetermined height;
a cam member mounted rotatably and adapted to lower the sheet pick-up feeding means so as to bring it into contact with the sheets when the uppermost surface of the sheets supported by said sheet support member is raised to the predetermined height, are to be sent out and adapted to raise the sheet pick-up feeding means to an upper initial position above the uppermost surface of the sheets on standby;
detection means for detecting a height of the an uppermost surface of the sheets according to a position at which the sheet pick-up feeding means contact with abuts against the sheets; and

control means for controlling the raising ~~and lowering~~ operations of said lifter means on the basis of the result of the detection of the height of the uppermost surface of the sheets so as obtained by the detection means to maintain the uppermost surface of the sheets supported by the sheet support member at a predetermined height,

wherein, when the sheet containing means is attached accommodated in the apparatus main body, and said cam member is pressurized and rotated by said sheet containing means, so the raising operation of said cam member is canceled by the rotation of the cam member by the sheet containing means, and the sheet pick-up feeding means is lowered from the upper initial position so as to enable said detection means to perform detection.

2. (Currently Amended) A sheet feeding device according to Claim 1, further comprising a canceling member to be pressurized and to be moved by the sheet containing means when the sheet containing means is attached to accommodated in the apparatus main body, wherein when said canceling member moves by said sheet containing means, said canceling member rotates said cam member, and the retention of the sheet pick-up feeding means at the initial position by said cam member is canceled by the detachment of the sheet pick-up means from rotating said cam member holding the sheet feeding means to the initial position by said canceling member.

3. (Currently Amended) A sheet feeding device according to Claim 2, further comprising wherein a spring for returning said canceling member returns to a position where said canceling member may be pressurized pressurization by the sheet containing means is

~~possible, when upon drawing of the sheet containing means is drawn from the apparatus main body.~~

4. (Currently Amended) A sheet feeding device according to Claim 3, wherein said cam member is equipped with a pressurization portion to be pressurized by said canceling member, and wherein the pressurization portion is mounted to the cam member so as to be capable of rotating by only a predetermined angle, and the pressurization portion does not prevent said canceling member from returning to the position where it is pressurized by the sheet containing means accommodated.

5. (Original) A sheet feeding device according to Claim 1, wherein said cam member is provided coaxially with a partially-toothless gear forming a one-revolution control clutch, and wherein said cam member and said partially-toothless gear are mounted so as to provide a relative rotation within a predetermined angle range.

6. (Currently Amended) A sheet feeding device according to Claim 5, wherein the sheet pick-up feeding means is transmitted a rotation and controlled in its rotation by said one-revolution control clutch, and wherein each time the cam member is rotated once the sheet feeding means sends out one of the sheets through rotation transmitted by said one-revolution control clutch, the rotation of said cam member causes the sheet pick-up feeding means to move between the initial position and a the feeding position in which the sheet pick-up feeding means abuts against the sheets.

7. (Currently Amended) A sheet feeding device comprising:
~~in which sheets contained in a sheet feeding cassette detachably attached to an apparatus main body; are fed by~~

~~a pick-up roller which feeds out the sheet contained said sheet feeding cassette; said sheet feeding device comprising:~~

a holder for supporting the pick-up roller so as to allow the pick-up roller to swing vertically;

an inner plate which is rotatably provided in the sheet feeding cassette and on which sheets are stacked;

a push-up plate provided in the apparatus main body and adapted to push up said inner plate by rotating;

a cam member having an outer circumferential portion adapted to abut against an abutment portion provided on said holder to raise the pick-up roller to a position above the sheet feeding cassette, and a linear portion adapted to lower the pick-up roller so as to bring the pick-up roller into contact with an the uppermost surface of the sheets stacked on said inner plate;

a position detection sensor adapted to detect whether the position in which the pick-up roller abuts against the sheets is set at a predetermined position on the basis of whether a flag provided on said holder is detected;

control means for controlling the pushing-up operation of said push-up plate on the basis of the detection by said position detection sensor; and

a lever adapted to rotate said cam member to cause the portion of said cam member against which said holder abuts to shift from the outer circumferential portion to the linear portion when the sheet feeding cassette is attached to accommodated in the apparatus main body.

8. (Original) A sheet feeding device according to Claim 7, further comprising separation means for separating from each other the sheets sent out from the sheet feeding cassette by the pick-up roller, wherein said separation means has a feed roller adapted to rotate in a direction in which the sheets are fed and a retard roller provided so as to be brought into pressure contact with said feed roller and adapted to rotate in a direction opposite to the direction in which the sheets are fed.

9. (Currently Amended) An image forming apparatus comprising:
image forming means for forming images on sheets;
sheet containing means detachably attached to an apparatus main body and
adapted to contain sheets to be supplied to said image forming means;
sheet pick-up feeding means adapted to vertically move for feeding the sheets
contained in said sheet containing means;
a sheet support member provided in said sheet containing means and adapted
to vertically move ~~movable up and down~~ while supporting the sheets;

lifter means for raising and lowering said sheet support member so as to bring
an uppermost surface of the sheets supported by said sheet support member to a predetermined height;

a cam member mounted rotatably and adapted to lower said sheet pick-up feeding means so as to bring it said sheet feeding means into contact with the sheets when the uppermost surface of the sheets supported by said sheet support member is raised to the predetermined height, are sent out and adapted to raise said sheet pick-up feeding means to an upper initial position above the uppermost surface of the sheets on standby;

detection means for detecting the height of the uppermost surface of the sheets according to the position in which said sheet pick-up feeding means contact with abuts against the sheets; and

control means adapted to control the raising and lowering operations of said lifter means on the basis of the result of detection of the height of the uppermost surface of the sheets so as obtained by said detection means to maintain the height of the uppermost surface of the sheets supported by said sheet support member at a predetermined height level,

wherein, when said sheet containing means is attached accommodated in said apparatus main body, and said cam member is pressurized and rotated by said sheet containing means, so the raising operation of said cam member is canceled by the rotation of the cam member by said sheet containing means, and said sheet pick-up feeding means is lowered from the upper initial position so as to enable said detection means to perform detection.

10. (Currently Amended) An image forming apparatus comprises:

~~in which sheets contained in a sheet feeding cassette detachably attached to an apparatus main body;~~

~~are fed to an image forming portion by a pick-up roller which feeds out the sheet contained said sheet feeding cassette to an image forming portion; ; said image forming apparatus comprising:~~

a holder supporting the pick-up roller so as to allow the pick-up roller to swing vertically;

an inner plate which is rotatably provided in the sheet feeding cassette and on which sheets are stacked;

a push-up plate provided in the apparatus main body and adapted to push up said inner plate by rotating;

a cam member having an outer circumferential portion adapted to abut against an abutment portion provided on said holder to raise the pick-up roller to a position above the sheet feeding cassette, and a linear portion adapted to lower the pick-up roller so as to bring the pick-up roller into contact with ~~an~~ the uppermost surface of the sheets stacked on said inner plate;

a position detection sensor adapted to detect whether the position in which the pick-up roller abuts against the sheets is set at a predetermined position on the basis of whether a flag provided on said holder is detected;

control means for controlling the pushing-up operation of said push-up plate on the basis of the detection by said position detection sensor; and

a lever adapted to rotate said cam member to cause the portion of said cam member against which said holder abuts to shift from the outer circumferential portion to the linear portion when the sheet feeding cassette is attached to accommodated in the apparatus main body.

11. (New) A sheet feeding device according to Claim 9, further comprising a canceling member to be pressurized and to be moved by the sheet containing means when the sheet containing means is attached to the apparatus main body, wherein when said canceling member moves by said sheet containing means, said canceling member rotates said cam member, and the retention of the sheet pick-up means at the initial position by said cam member is canceled by the detachment of the sheet pick-up means from said cam member.

12. (New) A sheet feeding device according to Claim 11, further comprising a spring for returning said canceling member to a position where said canceling member is possible pressurized by the sheet containing means when the sheet containing means is drawn from the apparatus main body.

13. (New) A sheet feeding device according to Claim 12, wherein said cam member is equipped with a pressurization portion to be pressurized by said canceling member, and wherein the pressurization portion is mounted to the cam member so as to be capable of rotating by only a predetermined angle, and the pressurization portion does not prevent said

cancelling member from returning to the position where it is pressurized by the sheet containing means.

14. (New) A sheet feeding device according to Claim 9, wherein said cam member is provided coaxially with a partially-toothless gear forming a one-revolution control clutch, and wherein said cam member and said partially-toothless gear are mounted so as to provide a relative rotation within a predetermined angle range.

15. (New) A sheet feeding device according to Claim 14, wherein the sheet pick-up means is transmitted a rotation and controlled in its rotation by said one-revolution control clutch, and wherein each time the cam member is one rotated by said one-revolution control clutch, the rotation of said cam member causes the sheet pick-up means to move between the initial position and a feeding position in which the sheet pick-up means abuts against the sheets.